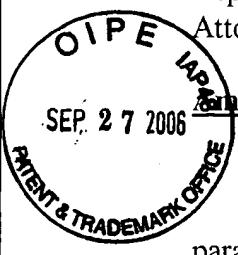


Appl. No. 10/530,676
Reply to Office Action of June 27, 2006
Attorney Docket No. 26648U



Amendments to the Specification:

Please replace the paragraph beginning on page 1, line 6 with the following amended paragraph:

[0002] From WO98/20832 an adapter is known with ~~respectively~~ an attachment means and a connection means to establish both physical fit and flow connection between:

- a container with one drain opening, otherwise being closed--and being substantially rigid and
- a device [[an]] at least occasionally liquid demanding ~~device~~, respectively.

Please replace the paragraph beginning on page 1, line 11 with the following amended paragraph:

[0003] The attachment means comprises one attachment port for connection to the drain opening of at least one detachable, and possibly replaceable, container, with sealing properties compared to the surroundings, and a valve being placed in fluid connection with the flow passage between the attachment port and the connection means for the liquid demanding device for automatically equalizing pressure inside the container compared to the surrounding pressure substantially simultaneously with the devices' draining of liquid from an attached container of the type mentioned. In WO98/20832 the at least occasionally liquid demanding device is for example constituted of a sucking baby as the container is a feeding bottle.

Please replace the paragraph beginning on page 1, line 19 with the following amended paragraph:

[0004] The adapter according to WO98/20832 has the severe disadvantage that liquid draining through the connection means is not unambiguously controlled, when the adapter [[has]] is [[been]] removed from the liquid demanding device, with the consequence[[,]] that liquid is easily ~~will be~~ spilled. Furthermore the mounting of the container on the attachment means is much elaborated because of the special shape of the attachment means external to the drain opening of the container.

Please replace the paragraph beginning on page 1, line 25 with the following amended paragraph:

[0005] The purpose of the present invention is to improve the known [[and]] adapter mentioned ~~adapter~~ and to remedy the above drawbacks.

Please replace the paragraph beginning on page 1, line 27 with the following amended paragraph:

[0006] The above purpose is fulfilled [[with]] by the adapter according to the present invention comprising the features as specified in claim 1. By utilizing the characterising means and features of the adapter according to the invention, the adapter can be kept sealed, thus avoiding any waste of liquid escaping from the container, while ~~there is~~ no sealing is established to the connection port. This is because the means in the devices for opening the take-out valve can only be effective, while [[that]] said sealing is established. Further the attaching means according to the invention remarkably simplifies the mounting or replacement of a liquid-containing or

Appl. No. 10/530,676
Reply to Office Action of June 27, 2006
Attorney Docket No. 26648U

empty container on the adapter of the invention, now being established via a sealing friction fit in the drain opening.

Please replace the paragraph beginning on page 2, line 6 with the following amended paragraph:

[0007] Preferably the sealing ~~attack~~ engagement of the attachment means in the outlet of the container is resulting in a mutual cohesive force, which is distinctively superior to the force produced by the sealing or positioning to the prism or cylinder, regardless of an actual size of the container, and actual quantity and type of liquid present inside the container, resulting in, that said adapter being correctly mounted according to [[a]] directions, ~~will stay~~ ing connected to the container in the case of the adapter's removal from the device by force influenced on the container.

Please replace the paragraph beginning on page 2, line 12 with the following amended paragraph:

[0008] Thus the risk [[that]] of a force contribution from even a high level of a column of heavy liquid can press the adapter out of the outlet area of the container in the moment of the most critical force related situation, [[where]] in which the adapter is ~~get~~ ing removed from the device, inter alia overcoming the sealing forces at the connection port, is avoided; the size of the container will often promote the container body and not the adapter body being influenced by the external force for the removal of both the adapter [[plus]] and the container from the device; the attachment means [[are]] is able to provide a heavy sealing grip between the container and the

Appl. No. 10/530,676
Reply to Office Action of June 27, 2006
Attorney Docket No. 26648U

adapter. Thereby it is avoided that the adapter remains connected to the device, while the container is [[being]] removed from the adapter, [[with]] probably resulting in a waste of liquid as a consequence.

Please replace the paragraph beginning on page 2, line 21 with the following amended paragraph:

[0009] Preferably the attachment means having contact with the drain opening wall consists of an elastomer. The attachment means can hereby easier take up irregularities and dimension tolerances in the outlet area of the container and secure a safer sealing; at the same time there will be no requirement for a sealing elasticity of the container's material around the outlet area.

Please replace the paragraph beginning on page 2, line 27 with the following amended paragraph:

[0010] Preferably the attachment means for contact in the outlet area can be shaped as an overall truncated cone pointing in the liquid an upstream direction of the liquid. The same adapter can by this means be used in different containers' outlet area with differing internal diameters according to a dimensional interval defined by the size of the truncated cone.

Please replace the paragraph beginning on page 2, line 29 with the following amended paragraph:

[0011] Preferably the overall truncated cone detailed can have a form constantly stepped,

Appl. No. 10/530,676
Reply to Office Action of June 27, 2006
Attorney Docket No. 26648U

towards the tapered end ~~constantly stepped form~~ substantially shaped as successively alternating adjacently placed circumferential ribs and grooves with a characterizing diameter constantly decreasing ~~respective characterizing diameter towards~~ the tapered end. Thus a better defined force or sealing against the actual container's outlet area is achieved, as a rib with a smaller diameter further inside the outlet area can execute the sealing function against the outlet area's internal wall and other ribs of larger diameters can provide a heavy force contributing to the cohesiveness of the container and the adapter, even if the larger diameter material is stressed beyond its sealing limit and/or is only partly being in touch with the edge of the outlet area.

Please replace the paragraph beginning on page 3, line 17 with the following amended paragraph:

[0015] Preferably the means of the device for opening of the take-out valve can be controllable. Consequently liquid can be taken out of the device as needed, as the take-out flow area ~~through the take-out valve possibly occasionally can occasionally~~ be blocked or regulated through the take-out valve, while the adapter is connected to the device.

Please replace the paragraph beginning on page 3, line 25 with the following amended paragraph:

[0017] Preferably the body of the adapter is shaped by moulding, preferably by injection moulding, ~~leaving possibility making it impossible~~ to produce the adapter body in a rational and cheap way, e. g. from a plastic.

Appl. No. 10/530,676
Reply to Office Action of June 27, 2006
Attorney Docket No. 26648U

Please replace the paragraph beginning on page 3, line 29 with the following amended paragraph:

[0018] Preferably the adapter's flow passage from the container to the device can be substantially linear, ~~yielding possibility for enabling~~ optimal flow.

Please replace the paragraph beginning on page 3, line 30 with the following amended paragraph:

[0019] Preferably the attachment means can be designed for attacking engaging the actually utilized container exclusively in the outlet, ~~yielding total independence of~~ the remaining structure of the actual container [[to]] independent of the attachment means.

Please replace the paragraph beginning on page 4, line 1 with the following amended paragraph:

[0020] Preferably the liquid contained and used can be drinking water, preferably mineral drinking water, ~~leaving possibility making it possible~~ to use the adapter according to the present invention in relation to preparation of food or drinks.

Please replace the paragraph beginning on page 4, line 8 with the following amended paragraph:

[0022] ~~Preferable~~ Preferably, the device used can be a domestic appliance such as an espresso machine. Utilizing this option in connection with relevant above mentioned features or options, e.g. a gourmet can prepare for himself a superb coffee drink from a selected mineral

Appl. No. 10/530,676
Reply to Office Action of June 27, 2006
Attorney Docket No. 26648U

drinking water stored ~~when not in use~~ in the original bottle when not in use, said bottle being constantly sealed with the adapter according to the present invention and [[being]] meanwhile being stored in a refrigerator.

Please replace the paragraph beginning on page 4, line 21 with the following amended paragraph:

FIG. 1b shows the adapter from FIG. 1a sectioned in its central plan parallel to the drawing plane,

Please replace the paragraph beginning on page 5, line 1 with the following amended paragraph:

[0024] Reference is now made to the FIGS. 1a-4, wherein the same reference numbers are used in all the figures for the same or similar items.

Please replace the paragraph beginning on page 5, line 4 with the following amended paragraph:

[0032] FIG. 1a shows a frontal elevation of a preferred embodiment of an adapter 1 according to the invention, the attachment means 2 pointing upwards. The attachment means 2 [[are]] is configured as an attachment port 3 for a sealing, forced attack engagement in the drain opening 5 outlet area of a container 4, e.g. a bottle (see FIG. 4; 5, and 6). The lower part of the adapter 1 consists of connecting means 7 configured as a connection port 8, whose external part being prismatic or cylindrical for a telescoping fit in a corresponding deep hole of suitable profile

Appl. No. 10/530,676
Reply to Office Action of June 27, 2006
Attorney Docket No. 26648U

depth in a receiving device 9 to [[yield]] provide a seal around the circumference of the prism or cylinder (FIG. 1b: 10) at telescoping placement of the connection port 8 in the deep hole at least some distance before reaching the bottom.

Please replace the paragraph beginning on page 5, line 16 with the following amended paragraph:

[0027] As mentioned, the [[The]] device 9 has as mentioned means for opening the take-out valve 11, when there is a need for the intake of liquid into the device 9 is required.

Please replace the paragraph beginning on page 5, line 18 with the following amended paragraph:

[0028] These opening means of the device 9 do not automatically have to activate the take-out valve 11 during the final part of the relative, telescopic movement of the prism or cylinder 10 and the deep hole after the sealing around the take-out connection port 8 has been established. Thereby, the take-out valve 11 is constantly kept open for constant outlet of liquid from the container 4 to the device 9, while an adapter and bottle combination is positioned on the device 9, as the means of the device 9 for opening the take-out valve 11 can be controllable. Consequently liquid can be taken out by the device 9 as needed, as the take-out flow area through the take-out valve 11, possibly occasionally, can be blocked or regulated, while the adapter 1 is connected to the device.

Please replace the paragraph beginning on page 5, line 27 with the following amended

paragraph:

[0029] The valve part 17 of the pressure equalizing valve 16 is biased in the cut-off position by a flexible, preferably elastic, biasing force so small, that the pressure equalizing valve 16 can open for pressure compensation with the fluid level being on level with the free surface of the attachment means 2 in the outlet. Thus all liquid in the container 4 can be drained by the device and be utilized, as the pressure equalizing valve 16 now lets in a compensating air volume from the surroundings to the container 4 over the remaining level of liquid, even with the lowest level of liquid, with the consequence that the container 4 efficiently can be emptied of liquid.

Please replace the paragraph beginning on page 6, line 3 with the following amended paragraph:

[0030] As seen from FIG. 1b the flow conduit of the pressure equalizing valve 16 can connect to the flow passage immediately upstream of the take-out valve 11. Thus an adapter 1 having an extremely short distance between the device 9 and the container 4 can be provided, so that a more stable stack can be achieved, when the container 4 is only supported on the adapter 1 placed in the deep hole of the device. Moreover, a smaller overall dimension of the container and adapter combination can be realized, being beneficial advantageous e.g. during storing in confined volumes like refrigerators or the like when not in use; i.e. you can advantageously store and cool (down) the bottle 4 and the adapter 1 as a unit and later on quickly mount the unit (bottle 4 inclusive including liquid and adapter 1) onto the device 9. Therefore it is not necessary to remove the bottle 4 from the adapter 1, before all the contained liquid has been drained.

Please replace the paragraph beginning on page 6, line 14 with the following amended paragraph:

[0031] Within It is ~~within~~ the scope of the present invention, [[that]] a system can be established comprising one or more devices functioning correlated to one or more containers, each container being mounted with "its own" adapter, freely alternating, and/or in relation to one or more devices and/or containers and/or respective liquids ~~dedicated, adapters, being~~ This is an advantage, as for example a user can protect him-/herself against unwanted use of the liquid content of specific container(s) [[of]] in a given device. As an example, in a household a first container 4 contains e.g. soup, which just has to be heated in a first type of device before consumption, and consequently, a connection port 8 of the adapter in this container [[could]] may, for example, have a rounded pentagonal profile and fit in the correspondingly outlined deep hole in the relevant device 9, while an adapter 1 to a second container 4 with special brewing boiling water for tea can have another profile of the connection port 8 fitting into a dedicated tea brewing device's deep hole.

Please replace the paragraph beginning on page 6, line 24 with the following amended paragraph:

[0032] FIG. 2 shows that the elastomer 12 of the attachment means 2 can be shaped as a sleeve 18, which is mounted on a supporting, preferably tubular, structure 19 of the adapter body 20, yielding providing an increased sealing force ability, because the backing tubular structure 19 inside can be braced by the elastic sleeve 18.

Please replace the paragraph beginning on page 7, line 4 with the following amended paragraph:

[0035] FIG. 3 discloses partly an example of a device 9 configured as an espresso machine. The adapter 1 is here shown mounted in a container 4, which is exemplified as a plastic bottle in a usual size for mineral drinking water for example for 1, 1 1/2, or 2 litres. Other container 4 types and sizes can of course be used inside within the scope of the claimed protection.

Please replace the paragraph beginning on page 7, line 8 with the following amended paragraph:

[0036] The bottle 4 with the adapter 1 connected is as a unit placed in the device's 9 deep hole, which can not be seen on FIG. 3, as the deep hole has included the adapter's connection port 8 prism or cylinder body 10, said connection port, thus also being invisible.

Please replace the paragraph beginning on page 7, line 11 with the following amended paragraph:

[0037] Earlier, the connection port 8 was guided all down into the device's deep hole, and ~~being there, established establishing~~ a seal encircling the prism or cylinder surface by means in the device 9. Thus liquid from the container 4 will be able to stream flow through the adapter 1 and further into the device 9 for utilization there, without liquids ~~leakage~~ leaking or spilling from the couplings: container ↔ adapter and adapter ↔ device.

Please replace the paragraph beginning on page 7, line 22 with the following amended paragraph:

[0039] Thus, with the attachment means 2 consisting of elastic material 12, form irregularities and dimension tolerances in the outlet area of the container 4 are easier taken up, to secure a safer sealing; at the same time there will be no requirement for a sealing elasticity of the container's material around the outlet area which thus can be stiff and hard.

Please replace the paragraph beginning on page 7, line 26 with the following amended paragraph:

[0040] Particularly, with the use of an elastomer 12 the sealing attack engagement of the attachment means 2 in the outlet of the container 4 can effect in a mutual cohesive force, which is distinctively superior to the force effected by the sealing or positioning to the prism or cylinder 10, regardless of an actual size of the container 4, and actual quantity and type of liquid present inside the container 4, resulting in, that said adapter 1--correctly mounted according to the directions—[[will]] staying connected to the container 4 in the case of the adapter's 1 removal from the device 9 by a force influenced on the container 4. Thus the risk, that a force contribution from even a high level of a column of heavy liquid can press the adapter 1 out of the outlet area of the container 4 at the moment [[of]] when the force related relates to the most critical situation, [[where]] the adapter 1 [[being]] is removed from the device 9, inter alia overcoming the sealing forces at the connection port 8, is avoided; the size of the container 4 will often promote support the container body and not the adapter body 20 being influenced by the external force for the removal of the adapter 1 [[plus]] and the container 4 from the device 9. The attachment means 2

Appl. No. 10/530,676
Reply to Office Action of June 27, 2006
Attorney Docket No. 26648U

are able to provide a heavy sealing grip between the container 4 and the adapter 1. Thereby, it is avoided that the adapter 1 remains connected to the device 9 during the removal of the container 4 from the adapter 1, what otherwise would have caused waste of liquid as a consequence.

Please replace the paragraph beginning on page 8, line 13 with the following amended paragraph:

[0042] The attachment means 2 for contact in the outlet area can be shaped as an overall truncated cone 13 pointing in ~~the liquid~~ an upstream direction of the liquid. The same adapter 1 can by this means be used in different containers' outlet areas 6 with differing internal diameters, according to a dimensional interval defined by the size of the truncated cone 13. So, different kinds of bottles can be used, regardless of the type and the dimensions of a possible external screw thread, as the adapter's ~~attack engagement~~ takes place inside the drain opening formed by the actual bottle neck, and regardless of already known or predictable diameter variations of the outlet area. Such variations are presented by e.g. easy-to-get, recyclable bottles of standard or proprietary design from the consumer market, such plastic bottles having substantially comparable contents of e.g. mineral drinking water. One producer's bottle design, despite ~~same contained the~~ volume of liquid contained being the same, [[is]] often deviating deviates a little from other producers' bottle design as to a connection thread for a screw cap and to the dimensions of the drain opening 5.

Please replace the paragraph beginning on page 8, line 25 with the following amended paragraph:

[0043] The overall truncated cone 13 can in detail be of a shape ~~tapered~~ tapering towards the end in constantly stepped form, substantially shaped as successively alternating adjacently placed circumferential ribs 14 and grooves 15 with ~~respective~~ a characterizing diameter constantly decreasing towards the tapered end (FIG. 1a). By this, a better defined force or sealing against the actual container's outlet area 6 is achieved, as a rib 14 with smaller diameter further inside the outlet area 6 can effect the sealing function against the internal wall of the outlet area 6 ~~internal wall~~ and other ribs 14 of larger diameter can provide a heavy force contributing to the cohesiveness of the container 4 and the adapter 1, even if the larger diameter material is stressed beyond its sealing limit and/or is only partly being in touch with the edge of the outlet area 6.

Please replace the paragraph beginning on page 9, line 3 with the following amended paragraph:

[0044] Containers, used several times, possibly during cycles in a recycling system, often have minor damages on the outlet's extreme area from blows or intruded objects[[,]]. Thus, [[why]] it is an advantage establishing the sealing further inside the outlet area, where both the probability for occurrences of and the extent of damages are smaller. The force yielding grip between adapter 1 and container 4 can be established closer to the outlet area and is not so sensitive to locally lacking sealing; also greater variations or failures in cross sections, e.g. egg shape compared to circular form, can be absorbed.

Please replace the paragraph beginning on page 6, line 3 with the following amended paragraph:

Appl. No. 10/530,676
Reply to Office Action of June 27, 2006
Attorney Docket No. 26648U

[0045] FIG. 4 shows seen Seen in a frontal elevation, FIG. 4 shows an example of a preferred embodiment of the invention's adapter 1 fitted into a container 4, with a sleeve of elastic material 12 connected to the bottle 4 in the drain opening 5. As the adapter 1 has been twisted or driven into the drain opening's outlet area 6 with force, the adapter 1 squeezes outwards from inside and seals the drain opening 5, so that liquid in the lying, more than half filled container 4 does not run out through the connection between the adapter 1 and the bottle 4. The automatic closing and locking and pressure equalizing valve 16 and the take-out valve 11, respectively, guarantees a sealing of the adapter's 1 other two openings towards the surroundings in the shown situation. Such position can also illustrate a partly filled bottle lying between consecutive situations of use of smaller amounts of the contained liquid contained in a device 9, according to the invention.